

Lisa Schwenk
Department of Justice
Bureau of Alcohol, Tobacco, Firearms and Explosives
Forensic Science Laboratory – Washington

OCCUPATION

Forensic Chemist

EDUCATION

Master of Science in Forensic Science, May 2008
Virginia Commonwealth University (VCU), Richmond, VA

Bachelor of Science in Chemistry, May 2006
State University of New York (SUNY) College at Brockport, Brockport, NY

AREAS OF EXPERTISE

Fire Debris, Trace Evidence

PROFESSIONAL EXPERIENCE

January 2022 – **Fire Debris Technical Leader**
present Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF)

September 2009 - **Forensic Chemist**
present ATF
Forensic Science Laboratory – Washington

August 2008 – **Criminalist I**
July 2009 Missouri State Highway Patrol
Crime Laboratory Division, Jefferson City, MO

May – August 2007 **Student Volunteer/Intern**
ATF
Forensic Science Laboratory – Washington

PUBLICATIONS

Schwenk, L. (2022). “Broader Perspectives: Case Studies of Detection Canines in the Field – Accelerant Detection Canine. L.E. DeGreef and C.A. Schultz (Ed.). *Canines: The Original Biosensors* (1st edition, pp. 761-763). Singapore: Jenny Stanford Publishing Pte. Ltd.

Schwenk, L. “Evidence packaging for fire debris: Why vapor-tight containers matter.” *Fire & Arson Investigator*, 64(3): 24-27, 2014

Schwenk, L., & Reardon, M.R. “Practical aspects of analyzing vegetable oils in fire debris.” *Journal of Forensic Sciences*, 54(4): 874-880, 2009.

PRESENTATIONS

Ignitable Liquid Classification of Small Engine Fuels and a Survey of Accelerant Detection Canine Responses, Mid-Atlantic Association of Forensic Scientists Annual Conference, May 2019

Ignitable Liquid Classification of Small Engine Fuels, ATF National Canine and Training Operations Center – Accelerant Detection Canine Re-Certification, May 2019

An Overview of Spontaneous Ignition, New Jersey Fire Investigation Symposium, May 2010

Practical Aspects of Analyzing Vegetable Oils in Fire Debris, American Academy of Forensic Sciences – 60th Annual Meeting, Criminalistics Session II, February 2008
VCU – Department of Forensic Sciences Graduate Seminar, September 2007

TRAINING PROVIDED

Fire Debris Analysis and Courtroom Presentation, ATF Arson/Fire Investigation for Attorneys

- Huntsville, AL, November 2022
- Philadelphia, PA, June 2022
- Huntsville, AL, July 2019
- Alexandria, VA, September 2014

Evidence Collection, Preservation and Laboratory Analysis for Fire Scene Evidence

- Joint Training – Wilmington City Fire Marshals' Office, ATF Wilmington Field Office and Delaware Office of the State Fire Marshal, November 2019
- IAAI New York Chapter, Spring Training, May 2019
- ATF Washington Field Division, Fire Investigation Seminar, September 2018
- Delaware State Fire School, Workshop for Fire Investigators, December 2017
- ATF Louisville Field Division, Fire Investigation Conference, August 2017
- Monmouth County, New Jersey Prosecutor's Office, Fire/Arson Investigation Training, April 2016
- Maryland Fire and Explosive Investigators Association, Fire Scene Training, March/April 2015
- Pennsylvania Association of Arson Investigators, Evidence Spoliation Training, January 2015
- Gloucester County, New Jersey Prosecutor's Office, Fire Investigator Training, November 2013
- ATF National Response Team Annual Training and Certified Fire Investigator Re-Certification, August 2013
- Kansas City Arson Task Force Conference, March 2012
- Missouri Fire and Fraud Investigation, Professional Development Symposium, October 2011

Petroleum Products and Laboratory Analysis for the Accelerant Detection Canine Handler, ATF National Canine and Training Operations Center – Accelerant Detection Canine Certification, annual delivery 2013 – present

Evidence Collection and Preservation for Fire Debris, National Fire Academy – Fire/Arson Origin and Cause Investigations, 40+ deliveries

ATF Laboratory Services – An Overview of Forensic Capabilities, ATF Columbus Field Division Conference, May 2016

Laboratory Results and Canine Training, ATF National Canine and Training Operations Center – Accelerant Detection Canine Re-Certification, June 2014

Introduction to Fire Debris Analysis, George Washington University – Graduate Seminar, numerous deliveries

Fire Debris Analysis and Accelerant Detection Canines, ATF National Canine and Training Operations Center – Accelerant Detection Canine Re-Certification, June 2013

Ignitable Liquid Classification for the Accelerant Detection Canine Handler, ATF National Canine and Training Operations Center – Accelerant Detection Canine Re-Certification, June 2011

CONTINUING EDUCATION

December 9, 2020	2021 NFPA 921, Chapter 17 – Physical Evidence and Canine Handler Teams IAAI, Virtual
May 14, 2019	Agilent MassHunter Software Training Agilent Technologies, Inc., Linthicum Heights, MD
June 11 – 15, 2018	Textile Fundamentals North Carolina State University, Raleigh, NC
June 13 – 16, 2018	Forensic Polarized Light Microscopy US Postal Inspection Service, Dulles, VA
April 5 – 8, 2016	Forensic Examination of Textile Materials Midwestern Association of Forensic Scientists, Cincinnati, OH

January 11, 2015	FirstDefender RMX – Chemical Identification System Thermo Fisher Scientific, Beltsville, MD
July 28 – August 1, 2014	Fiber Identification Hooke College of Applied Sciences, Westmont, IL
June 2 – 6, 2014	Fundamentals of X-ray Powder Diffraction International Centre for Diffraction Data, Newtown Square, PA
January 27 – 31, 2014	ASCLD/LAB International Assessor Training ASCLD/LAB, Vienna, VA
April 30 – May 4, 2012	Forensic Polarized Light Microscopy US Postal Inspection Service, Dulles, VA
February 20 – March 2, 2012	Fire/Arson Origin and Cause Investigations National Fire Academy, Emmitsburg, MD
August 30 – September 1, 2011	Comprehensive Fire Debris Analysis National Center for Forensic Sciences, Largo, FL
August 17 – 20, 2010	Chemistry of Pyrotechnics and Explosives Dr. John Conkling, Beltsville, MD
August 3 – 6, 2010	Basic Courtroom Procedures ATF, Charleston, WV
July 12 – 16, 2010	Infrared Spectroscopy I IR Courses, Inc., Brunswick, ME
April 20 – 24, 2009	Advanced Forensic Microscopy: Paint and Polymers National Institute of Justice (NIJ) Forensic Microscopy Training Program McCrone Research Institute, Chicago, IL
March 24 – 26, 2009	Infrared Microscopy NIJ Forensic Microscopy Training Program College of Microscopy, Westmont, IL
January 19 – 23, 2009	Advanced Forensic Microscopy: Hair and Fibers NIJ Forensic Microscopy Training Program McCrone Research Institute, Chicago, IL
January 5 – 9, 2009	Forensic Polarized Light Microscopy NIJ Forensic Microscopy Training Program McCrone Research Institute, Chicago, IL

PROFESSIONAL AFFILIATIONS

2016 – 2017	National Fire Protection Association (NFPA) 921: Guide for Fire and Explosion Investigators Canine Task Group, 2021 edition
2012 – present	Midwestern Association of Forensic Scientists
2012 – 2016	International Association of Arson Investigators (IAAI)
2011 – 2021	ATF National Response Team
2010 – present	American Society of Trace Evidence Examiners •Membership Committee Chair (2016 – 2019) •Membership Committee Member (2010 – 2012)
2006 – 2011	American Academy of Forensic Sciences
2005 – 2013	American Chemical Society

Revised 3/14/2023

RESEARCH MENTORSHIP AND COLLABORATIONS

Whitney, R.K. "Effective laundering conditions for ignitable liquid decontamination of fire scene clothing used by the Bureau of Alcohol, Tobacco, Firearms and Explosives." *Virginia Commonwealth University Scholars Compass*, 2020.

SCIENTIFIC MEETINGS ATTENDED

2021	American Academy of Forensic Sciences Annual Meeting
2019	Mid-Atlantic Association of Forensic Scientists Annual Conference
2008	American Academy of Forensic Sciences Annual Meeting
2007	Midwestern Association of Forensic Scientists Annual Meeting

TOURS OF MANUFACTURING FACILITIES

2016	Shell Refining Company, Houston, TX
2013	Delaware City Refining Company, Delaware City, DE
2011	Paulsboro Refining Company, Paulsboro, NJ



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The table below is a summary of expert testimony provided by Lisa Schwenk from 2019 through present.

Court Location	Testimony Date	Case Name
Rockingham County Superior Court	03/29/19	State of New Hampshire v. John Gates
Union County Circuit Court	03/19/21	State of South Dakota 63JUV20-38 (Juvenile Court)
Rockingham County Superior Court	05/17/22	State of New Hampshire v. John Gates
North Dakota District Court	03/21/23	United States v. Donovan Jay White Owl
Pierce County Superior Court	05/17/23	State of Washington v. Ezra Ralston and Sean Higgins